

Listing of the Claims:

1. (Previously Presented) A binding line for gathering a plurality of signatures to form a book, comprising:

a gathering conveyor;

a plurality of packer boxes positioned along the conveyor, each of the packer boxes being adapted to deliver a signature to the conveyor;

a feeder system operatively associated with at least one of the packer boxes, the feeder system including a feed conveyor and a plurality of feeder boxes, each of the feeder boxes being adapted to deliver a distinct signature to the associated packer box;

and

a control system operatively connected to the packer boxes and being adapted to activate the packer boxes to thereby deliver a set of signatures to the gathering conveyor, the control system further being operatively connected to the feeder boxes and being adapted to activate a selected one of the feeder boxes to thereby deliver a selected one of the distinct signatures from the feeder system to the associated packer box.

2. The device of claim 1, each of the selected signatures delivered from the feeder system having a blank reserved portion, and wherein the feeder system includes a printer positioned to apply a predetermined printed message to the reserved portion of the selected signature prior to delivery to the associated packer box.

3. The device of claim 2, each of the selected signatures having a backbone, the printer being positioned to apply the printed message perpendicular to the backbone.

4. The device of claim 2, wherein the control system includes a feed system controller operatively connected to the printer, the feed system controller for determining the content of the printed message.

5. The device of claim 2, wherein the feed conveyor includes an output end for delivering the selected signature from the selected feeder box to the associated packer box, and including a printer disposed adjacent the conveyor output end.

6. For use with a binding line having a plurality of packer boxes positioned along a gathering conveyor, a feeder system for feeding at least one of the packer boxes comprising:

a plurality of feeder boxes associated with the one packer box, each of the feeder boxes being adapted to contain a distinct signature, each of the feeder boxes being adapted to deliver the distinct signature to a feed conveyor,

the feed conveyor being adapted to receive the distinct signatures from the feeder boxes and to deliver the signatures from the feeder boxes to the associated packer box;
and

a primary controller for activating the packer boxes to thereby deliver a selected set of signatures to the gathering conveyor, the primary controller being operatively connected to a feed system controller for activating a selected one of the feeder boxes to thereby deliver a selected one of the distinct signatures from the plurality of feeder boxes to the associated packer box.

7. The device of claim 6, each of the signatures in the feeder boxes having a blank reserved portion, and including a printer positioned adjacent the feed conveyor for applying a predetermined printed message to the reserved portion of the selected signature prior to delivery to the associated packer box.

8. The device of claim 7, each of the selected signatures having a backbone, the printer being positioned to apply the printed message perpendicular to the backbone.

9. The device of claim 7, wherein the feed system controller is operatively connected to the printer, the feed system controller being adapted to determine the content of the printed message.

10. The device of claim 7, wherein the feed conveyor includes an output end for delivering the selected signature from the selected feeder box to the associated packer box, and wherein the printer is disposed adjacent the conveyor output end.

11. (Previously Presented) A binding line for gathering a plurality of signatures to form a book, comprising:

a gathering conveyor;

a plurality of packer boxes positioned along the conveyor, each of the packer boxes being adapted to deliver a distinct signature to the [conveyor,] conveyor;

a primary controller for activating a selected set of packer boxes to thereby deliver a set of signatures to the gathering conveyor; and

adjustable feed means associated with at least one of the packer boxes for delivering a selected signature to the associated packer box, the feed means including a plurality of feeder boxes and having a feed controller operatively connected to the primary controller, the feed controller for causing a selected one of the feeder boxes to deliver a selected signature to the associated packer box.

12. (Previously Presented) A method for expanding the capacity of a binding line comprising the steps of:

providing a binding line adapted to gather a plurality of signatures to form a book and having a plurality of packer boxes positioned along a gathering conveyor[:];

operatively connecting a plurality of feeder boxes to a selected one of the packer boxes;

positioning a feed conveyor adjacent the feeder boxes; and

controlling the feeder boxes to thereby deliver a selected signature to the feed conveyor for delivery to the selected one of the packer boxes.

13. The method of claim 12, including the additional step of applying printed material to the selected signature prior to delivering the selected signature to the selected one of the packer boxes.

14. The method of claim 13, the binding line further including a primary controller for selectively enabling and disabling sets of the packer boxes, and including a feed controller connected to the primary controller for activating the feeder boxes.

15. The method of claim 14, including a printer disposed adjacent an output end of the feed conveyor, and including the additional step of programming a controller to apply distinct printed material to each selected signature.

16. (New) A binding line for gathering a plurality of signatures to form books, comprising:

a plurality of packer boxes for delivering an associated signature to be gathered to form first and second books;

a feeder system operatively associated with at least one of the packer boxes that includes a conveyor and a plurality of feeders, each of the feeders being adapted to deliver a distinct signature to the associated packer box; and

a controller in communication with the feeders to activate a first combination of the feeders to form at least a portion of the first book and a second combination of the feeders different from the first combination to form at least a portion of the second book.

17. (New) The binding line of claim 16, wherein the feeder system further includes a printer positioned to apply a predetermined printed message to a reserved portion of the signatures delivered from the feeders prior to delivery to the associated packer box.

18. (New) The binding line of claim 17, wherein each of the signatures has a backbone and the printer applies the printed message perpendicular to the backbone.

19. (New) The binding line of claim 17, wherein the controller is in communication with the printer to determine the content of the printed message applied to the signatures.

20. (New) The binding line of claim 17, wherein the feed conveyor includes an output end for delivering the signatures from the feeders to the associated packer box and the printer is positioned adjacent the output end of the feed conveyor.

21. (New) A feeder system for delivering signatures to an associated one of a plurality of packer boxes on a binding line, comprising:

a plurality of feeders each adapted to deliver a distinct signature to the associated one of the packer boxes; and

a controller in communication with each of the feeders to activate a first combination of the feeders at a first time and a second combination of the feeders different from the first combination at a second time.

22. (New) The feeder system of claim 21, further comprising a printer for applying a predetermined customized or personalized printed message to a reserved portion of the signatures delivered from the feeders prior to delivery to the associated one of the packer boxes.

23. (New) The feeder system of claim 22, wherein each of the signatures has a backbone and the printer applies the printed message perpendicular to the backbone.

24. (New) The feeder system of claim 22, wherein the controller is in communication with the printer to determine the content of the printed message applied to the signatures.

25. (New) The feeder system of claim 21, including a feed conveyor for delivering the distinct signatures from the feeders to the associated one of the packer boxes.

26. (New) The feeder system of claim 25, wherein the feed conveyor has an output end, and a printer is positioned adjacent the output end of the feed conveyor.

27. (New) A method for expanding the capacity of a binding line having a plurality of packer boxes, comprising the steps of:

operatively connecting a plurality of signature feeders with an associated one of the packer boxes, supplying each of the signature feeders with a distinct signature; and
selectively controlling the feeders to deliver a first combination of the distinct signatures to the associated one of the packer boxes and a second combination of the distinct signatures different from the first combination to the associated one of the packer boxes.

28. (New) The method of claim 27, wherein selectively controlling the feeders includes programming a controller to select the distinct signature to be delivered to the packer box.

29. (New) The method of claim 27, further comprising applying printed material to the distinct signatures during delivery to the associated one of the packer boxes.

30. (New) The method of claim 27, wherein selectively controlling the feeders includes programming a controller to apply customized or personalized information on the signature.

31. (New) A feeder assembly for use with a binding line, comprising:
a feed conveyor configured to be operatively coupled to the binding line; and
a plurality of feeders operatively coupled to the feed conveyor and configured to
hold signatures and respond to signals from a controller to cause the feeders to selectively
deliver first and second combinations of the signatures to the binding line via the feed
conveyor, wherein the first combination of the signatures is different from the second
combination of the signatures.
32. (New) A feeder assembly as defined in claim 31, wherein the feed conveyor is
configured to be operatively associated with the binding line via a packer box associated with
the binding line.
33. (New) A feeder assembly as defined in claim 31, further comprising a printer
disposed adjacent to the feed conveyor to print on the at least one of the signatures.
34. (New) A feeder assembly as defined in claim 31, wherein each of the feeders is
configured to hold a distinct signature.